

## THE BOILER EXPLOSIONS.

In **THE BUILDER** you have very properly called attention to the fearful steam boiler explosions with which we are so frequently visited. Were it Labour v. Capital, we should long since have had an abundance of legislation to cure the evil; but as it is Capital v. Labour, the Legislature stirs not; the truth is kept from view; and such awful catastrophes are palliated, excused, or preposterously ascribed to some mysterious agency, which really only exists in the imagination. The chief cause of these awful inflictions, by which so many unfortunate beings are frequently hurried into eternity, arises from employing men who know little or nothing of boilers and engines, and the power they have to control, beyond the mere turning "on" and "off" the steam. And why? because they are cheaper; and these are often required besides to perform labour wholly incompatible and inconsistent with a due discharge of their duties to their engines, even if they do understand them. Hence arises the deficiency of water, the excess of pressure, or both conjointly, added to which perhaps there is a defective boiler; and now you have the chief cause or causes, if not the whole, of these slaughterer explosions.

Thus engine proprietors wilfully jeopardise the lives of all persons within the influence of such disasters by employing incompetent persons for the sake of saving a few shillings per week, instead of well-trained engine-drivers; and hence such lamentable results are almost continuous. Locomotive engines afford evidence in point that it is not necessarily so, for these are under the control of well-trained men; and though there are, perhaps, thousands in daily use, working at a much greater pressure than any fixed engine, accidents of the above nature are of rare occurrence indeed. Neither the employment of inspectors, nor the proving of boilers occasionally, would afford security; for, in the latter case, it might possibly facilitate the catastrophe sought to be avoided, while, in the former, a boiler may be in the best condition on inspection, and yet explode under such management as the above within a few hours. Indeed, the only remedy for the present deplorable state of things seems to be to punish the cupidity of all engine owners by subjecting them to ample damages for the loss of life and injuries occasioned, to be paid to the survivors and friends; and I doubt not that we should not only have boilers properly made, but competent and well-trained hands to manage them, when we should rarely hear anything more of this horrible slaughterer system.

W. G.

At the inquest in the recent Manchester case, Mr. W. Fairbairn gave evidence to the effect that he had inspected the burst boiler at the corner's request, and that, in his opinion, the accident did not arise so much from defective construction as from gross mismanagement or ignorance. Other evidence appears to have shown that there was not so much mismanagement, or even ignorance, as other witnesses in spite of warning, both as to the want of repair in the boiler, and also as to the peril shortly before the explosion took place. And this seems to be the view taken by the jury; for in this case a verdict of manslaughter has been given against the engineer and his employer. The jury were of opinion that the boiler was efficient and perfectly competent to perform all the duties required from it, but that gross negligence had been displayed in its management and attendance. In the case of Southampton evidence of accidental death has been given, without admission in form of an opinion, that the junction-valve upon the boiler, leading to the bowing down, was closed at the time of the explosion, and that the overloading of the junction-valve prevented the relief which was necessary for the escape of the steam; but that the jury had no evidence before it to show by whom, or by what means, the junction-valve was closed; but that the overloading of the safety-valve was attributable to the act or omission of the engineer, Joseph Hyde, of whose conduct in this matter the jury expressed their unqualified

condemnation. It was also the opinion of the jury that the applying of this boiler to high-pressure steam was highly censurable. With a view to guard against imperfect boilers for the future, the jury recommend a certain standard to be adopted,—say twice the extent of pressure intended to be applied; and that all boilers be tested and stamped or registered by a responsible and appointed authority prior to their removal from the makers' premises.

It is stated by a correspondent of the *Gateshead Observer*, that no less than 1,600 men and boys have been destroyed by explosions of boilers in this country within the last three years only.

## FOREIGN INTELLIGENCE.

**Paris.**—The Jardin des Plantes, which at one time was the first establishment of its kind in the world, has been behindhand of late years: all the departments and enclosures of the quadrupeds, which are now of wood, are to be replaced by iron railings, and new walks will be laid out. An immense place, Rue de Buffon, will be converted into a school of arboriculture, through which the little river la Bièvre, converted into a canal, will pass.

**Paris.**—Cathedral of Notre Dame.—The new clerestory of the cathedral is near its completion. The series of painted glass windows is noticeable. It represents the chronological history of the bishops and archbishops of Paris from St. Landry, who lived under Charlemagne, until M. Affre. These stained windows are from the manufactory of M. Maréchal, of Metz. In another passage the history of St. Geneviève, patroness of Paris, is also depicted on glass. A winding staircase leads thence to the place containing the treasures of the cathedral, &c. This new clerestory has cost one million of francs, and the total restoration of Notre Dame will cost nine millions more, which heavy expense, however, was unavoidable. The several flying buttresses which were rebuilt, have alone cost three million francs.

**Perth.**—There has been exhibited here of late, in the Hall of the National Hungarian Casino, an interesting work, chased in silver by M. Szentpetery, a jeweller, more than seventy years old. It represents the captivity of the Hindoo king Porus by Alexander the Great, and has been made after the painting of Lebrun. The size of the silver plate is 25 inches by 12, on which there are represented in the foreground, forty-six human figures, and sixteen horses and elephants; in the background, 105 human figures, and a proportionate number of horses and elephants. Amateurs here declare it equal to any work of Benvenuto. It is destined for the London Exhibition, and will be offered for sale.

**Laebig and the English "Prothimiat."**—The German philosopher measures (strangely) the degree of civilization a nation may have reached, by the quantity of soap used, which is very much akin to the old proverb, that cleanliness is next to godliness. The average consumption of this proprietary substance averaging about 5 lb. for each person in this country, places the people far above any of its European neighbours in the scale of culture and civilization.

**Coburg.**—The small townlet of Sonnenberg will appear at the London Exhibition with a very artistic plastic representation of the villa of the Duke of Coburg, Roersnes, well known to English tourists. M. Hoffmeister will exhibit a festival table and armchair, ornamented with wood carvings in the Gothic style, at which curious work more than twenty artists, amongst them Rehnas of Coburg, have exerted themselves for many months past.

**Société Nationale des Antiquaires de France.**—This head Archaeological Society of France has, at their meeting of 9th April, elected seven resident members, viz. Messrs. W. Brumont de Preiss, author of "History of Sicily under the Greeks;" Ernest Viet, translator of "Zosimus;" Huillard Breholles, author of "Norman Monuments in Sicily and Italy;" Abbé Archer Marais, one of the authors of "The Monography of the Cathedral of Bourges;" Edouard Lantier, author of "History of Glass

Painting," &c. Mr. Joseph Smith, of London, and Don Sebastian Castellanos, conservator of the antiquities of the National Library of Madrid, have, on the same occasion, been elected foreign associates.

**Latent Diacermes in Algeria.**—The ruins of Tagumadi (*Tharugadi*?) have of late yielded important results, and promise to become a source of much interest. They lie several leagues north-east of Lambesis, and are surrounded by mountains, mostly covered with snow. The native Arabs call them Bordas Timiga. At a depth of three metres, a theatre nearly in an entire state of preservation has been found; also a temple, which, according to an inscription, has been the capitol, and whose fluted Corinthian columns have, near the acie, a diameter of nearly two metres. The largest and best-preserved monument of Tharugadi, however, is a triumphal arch with three portals, adorned with marble Corinthian columns, whose sculpture is very superior. A number of mosaic also, and other more ruined monuments, await the attention of some studious traveller.

## NOTES IN THE PROVINCES.

**THE Church of Felpham, near Bognor,** has been of late rather extensively repaired. The interior has been restored, and the old oak benches replaced by new altho' affording increased accommodation.—Mr. Fulton, the engineer, has been employed to ascertain the expense and practicability of deepening the Medina, so as to give 4 feet of water at the Town Quay of Newport at the lowest state of the tide, and has made a report to the town council, in which he estimates the cost at £4,000. It is stated that parties are in treaty for the purchase of Worcester-terrace, Clifton-park, Clifton, with the idea of finishing it immediately. Two treble villas are being built on the waste piece of ground between Clifton-park and the bank of Pembroke-park. Other villas are also to be forthwith completed.

At a recent meeting of the Altrincham Gas Company, the directors "congratulated the shareholders on the prospects of the company, and thought they should soon be able to reduce the price of gas to the consumers, and thereby promote an increased consumption." Messrs. Robert McKean and Co., of the Victoria Iron Works, Birkenhead, have lately erected an iron entrance-gate at the east entrance of the pale of offices known as York-buildings, at Liverpool. The entrance length of the frame is 10 feet 6 inches, the width 7 feet 6 inches, the length of gates 15 feet 1 inch, and the width 3 feet 1 inch. The gate was designed by Mr. Picton, the architect of the buildings.—At the last meeting of the Sheffield Gas Company, the chairman, while boasting that the directors "had reduced the price while they had increased the dividend," rather inconsistently said, that if G. & C. did not satisfy customers, he thought they would hardly be satisfied unless the gas were given." Does he not think there may be still a margin within which he might "reduce the price" while he "increased the dividend?" Something like this, however, may be in contemplation, for in moving that a dividend of 9 per cent. on the paid-up capital be paid to the shareholders, and a balance paid to the depreciation fund, he added that "they had been teased that they must be bad managers that they could not get a better dividend, and yet sell at a lower price: he wanted to show that he could pay a better dividend, and that he would do so." Now, by the expensive law of gas statistics, there is but one way of legitimately, and accurately, and assuredly doing that, viz. by lowering the price. The

At the same meeting a chairman stated that he had been to Southampton to see the working of "Walter's" water or steam gas, and found it was sold at 7½d. per 1,000 feet. The president had also explained it to him in the presence of the manager of the Manchester works, and a gas manager from London, and they were satisfied there would be no advantage from the patent, if he could do what he said. The South Metropolitan Gas Company had made trial of the patent, but on recently visiting their works he found they had had no success in it, and that they had thrown a deal of money away. It may be concluded that we more than once give a premium as to the alleged advantage of this sort of gas, and that we have never yet introduced or even anything to qualify that estimate.